REMR MATERIAL DATA SHEET CM-SE-1.63

CONCRETE SEALER: HYDROZO CLEAR 30M

(Supersedes previously issued CM-SE-1.63)

1. NAME

Hydrozo Clear 30M

2. MANUFACTURER

Hydrozo Coating Company
1001 "Y" Street
P. O. Box 80879
Lincoln, NE
Telephone: (402) 474-6981

3. DESCRIPTION

Hydrozo Clear 30M is a clear, one-coat application concrete sealer.

4. USES

Hydrozo Clear 30M penetrates the concrete to protect against chloride (salt) and water penetration, freeze-thaw damage, and rusting of reinforcing steel. It has had extensive field performance and excellent results in laboratory tests.

5. MANUFACTURER'S TECHNICAL DATA

Percent solids by weight:	30% (approx)
Penetration:	1/8 to 3/8 in. (approx)

Percent of water absorption (ASTM C 642) (Oklahoma DOT):

48 hr	0.10%
50 days	0.83%

Scaling resistance (ASTM C 672) (nonair-entrained concrete):

50 cycles coated concrete	No scaling
20 cycles untreated concrete	Severe scaling

Resistance of Chloride Ion Penetration (AASHTO T259-80):

90% (min) reduction @ 1/2-in. depth	
90% (min) reduction @ 1-in. depth	

Moisture vapor transmission rate (ASTM D 1653-72):
33 g/sq ft/24 hr @ 75 °F

Flash point (ASTM D 3278-73): > 90 °F

NCHRP 244

Series II-Cube Test weight gain:	87.5% reduction-exceeds criteria
absorbed chloride:	85.1% reduction-exceeds criteria
Series IV-Southern climate absorbed chloride:	96% reduction-exceeds criteria
Resistance to acids (general)	Good to excellent
Sunlight (ultraviolet)	Excellent
Flash point ASTM D 3278-73	Greater than 90 °F

Surface appearance after coating application	Slight darkening

Warranty: Hydrozo Coating Company supports its products with an outstanding limited warranty program. Warranties are available on an individual job basis only. Consult Hydrozo Coating Company for details.

6. MANUFACTURER'S GUIDANCE FOR APPLICATION

Test small area of surface before starting general application of any clear coating to assure desired results.

Surface preparation: Clean new concrete surfaces to remove all laitance, construction dust, and cure material prior to application. Thoroughly clean older concrete surfaces to remove surface materials, previous coatings, and material tracked or carried in by vehicles. A complete waterblast or sandblast may be needed to achieve the desired surface preparation.

Perform all crack control, caulking and expansion joint sealing and patching before application. Allow 6 to 12 hr curing time for caulking and sealant materials (or until they are set).

Surfaces must be clean and dry. Surface, air, and material temperatures should be 50 °F or higher during application.

Do not apply when temperature of concrete is over 120 °F, since solvent will evaporate too readily for penetration. Sealer may be applied at temperatures as low as 40 °F, but caution must be taken. When applying material in marginally low temperatures, heavy brooming or warming of the material may be needed to help penetration into the surface.

Apply with a flooding action with a push broom. The sealer may be applied with low-pressure airless spray or roller, but it must be broomed into the surface. Normal coverage rates are approximately 100 to 125 sq ft/gal. On lightweight concrete or more porous concrete surfaces, the coverage may be lower.)

When the coating is first applied, the slickness of the surface increases. It will return to normal when the coating has penetrated.

7. CORPS OF ENGINEERS' EVALUATION (tested as concrete sealers only)

Physical and mechanical properties:

Percent solid (ASTM D 1644, Method A):	30.0%

Percent moisture absorption (ambient temp) (ASTM C 642-82):

1 day	0.16%
2 days	0.26%
4 days	0.41%
7 days	0.59%

Ratio of percent moisture absorption for treated to nontreated specimen (2-day submersion):	5.5%

Percent vapor transmittance (see REMR Technical Note CS-ES-1.8):

2 days	0.33%
4 days	0.57%
7 days	0.86%

Ratio of percent vapor transmittance for treated to nontreated specimen (2-day diffusion):	17.8%

8. ENVIRONMENTAL CONSIDERATIONS

Reasonable caution should guide the preparation, repair, and cleanup phases of activities involving potentially hazardous and toxic chemical substances. Manufacturer's

recommendations to protect occupational health and environmental quality should be carefully followed. Material safety data sheets must be obtained from the manufacturers of such materials. In cases where the effects of a chemical substance on occupational health or environmental quality are unknown, chemical substances should be treated as potentially hazardous toxic materials.